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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Yasuhiko Yokoi

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EXAMINER

BOWERS, NATHAN ANDREW

ART UNIT

PAPER NUMBER

1744

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/715,127	Applicant(s) YOKOI ET AL.	
	Examiner Nathan A. Bowers	Art Unit 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 December 2006 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1) Claim 1 is rejected under 35 U.S.C. 102(b) as being unpatentable over Kavieff (US 4883401) in view of Yahiro (US 6228636), Gonska (US 6568770) and Walters (US 5657720).

Kavieff discloses a storage apparatus for storing containers (Figure 2:21) inside a chamber adjusted to predetermined ambient conditions. A container transport device (Figure 3:24) is disposed inside the chamber in such a way that the transport device is centrally located between container accommodating racks (Figure 2:10 and Figure 2:12) arranged on opposite sides. The transport device comprises a transport table (Figure 3:25) for placing the container thereon, and a drive mechanism comprising a plurality of motors designed to move the transport table in the X, Y and Z directions. This is disclosed in column 3, lines 16-52. Figure 2 clearly indicates that container accommodating portions (Figure 2:20) are arranged along the Z axis at all times, and Figure 3 clearly indicates that container accommodating portions are arranged along the Y axis at all times. Kavieff further teaches that the container accommodating racks comprise a plurality of stackers (Figure 3:18) arranged in the direction of the Y axis. Each of the stackers comprises container accommodating portions repeatedly provided in the direction of the Z axis. Additionally, the chamber has a container inlet for transporting the container into the chamber. The container inlet is operably connected to a carriage mechanism (Figure 2:34) for moving the containers inside the chamber. This is apparent from Figures 2 and 3 and from

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column 3, line 53 to column 4, line 11. Kavieff, however, does not expressly disclose a shutter mechanism for opening and closing the container inlet.

Yahiro discloses the incubator as described in the rejection above. Yahiro also discloses an inlet (Figure 1:202) for transporting the container into the chamber. In column 2, line 53 to column 3, line 2, Yahiro teaches that the inlet comprises a shutter mechanism (Figure 1:5) for opening and closing the container inlet.

At the time of the invention, it would have been obvious to replace Kavieff's inlet mechanism with Yahiro's shutter mechanism since the shutters are capable of effectively blocking container inlets when not in use. This type of restricted access way would have been desirable because it would have prohibited contaminants from entering the storage chamber during operation. Yahiro teaches in column 1, lines 30-35 that unless a shutter is provided, the gaseous atmosphere inside the storage area will flow out of the chamber, and the air will flow into the chamber, thereby drastically altering the temperature and humidity inside. This is critical since many types of storage articles are sensitive to environmental changes.

The combination of Kavieff and Yahiro still differs from the claimed invention because Kavieff and Yahiro do not disclose that the stackers are mounted on a drawer installed on a base that can be slid through an opening. Yahiro does disclose a door (Figure 3:3) and an opening (Figure 3:102), but does not teach that the stackers are slidable through the opening.

Gonska discloses an incubator storage apparatus comprising a transport device (Figure 2:3) and a storage means (Figure 2:9). The storage means comprises multiple stackers for arranging a plurality of containers along the Z-axis. The stackers are positioned upon a drawer

(Figure 5:11) installed within the base of the incubator. Gonska discloses a door (Figure 1:8) for the assembly through which stackers are removed. This is disclosed in column 3, lines 52-55.

Gonska, however, does not teach that the drawer is slidably withdrawn.

Walters discloses a culture apparatus in which a plurality of drawers (Figure 1:70) are arranged within a chamber. The drawers are arranged upon conventional rollers (Figure 2:14) that allow the drawers to be slidably removed from the chamber through an opening created by a door (Figure 1:23).

At the time of the invention, it would have been obvious to provide an opening with a door facing the direction of the Y-axis in the invention disclosed by Kavieff for facilitating the removal of the stackers. By mounting the stackers on a slidable base, the stackers may be easily removed from the device, which in turn reduces the amount of time that the interior of the incubator is exposed to the outside environment. Since the stackers are usually removed for maintenance purposes, it would have been beneficial to supply Kavieff's invention with the means necessary to quickly undertake cleaning and upkeep procedures without interfering with the normal operation of the incubator.

2) Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kavieff (US 4883401) in view of Weselak (US 20030031602) and Barbera-Guillem (US 6673595).

Kavieff discloses the apparatus as previously described above. Column 4, line 31 to column 5, line 49 indicate that the apparatus utilizes identification information and a means for reading the identification information as a method for tracking samples that are disposed within the containers. A mechanism of tracking and storing identification information is provided

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within the incubator apparatus, as well as a control means for controlling the operation of the apparatus body with reference to the identification information stored in the storage means. Kavieff, however, does not state that similar tracking/identification means are provided for managing the stackers.

Weselak discloses an incubator storage apparatus that comprises a plurality of shelves (Figure 1:104) that are arranged vertically as stackers. Figure 3 illustrates how the shelves may be positioned adjacent to openings (Figure 3:302) to facilitate the storage of containers within the incubator. Weselak discloses in paragraphs [0016]-[0018] that the shelves contain identification information that allows the user to consistently keep track of shelf location and what samples containers are located on a specified shelf.

At the time of the invention, it would have been obvious to provide each of the stackers disclosed by Kavieff with identification information. This would have allowed one to track the movements of the stackers in and out of the incubators in order to keep track of the contents of each stacker. Weselak teaches that it is common practice to remove stackers from an incubator, and subsequently replace the old stacker with a new one. Since the stackers carry the material that is being incubated within the containers, it would have been important to know at any given time where a desired stacker is located (what incubator it is in). Kavieff teaches that the identification information is in the form of a barcode or a similar coded device, which intrinsically could be positioned upon the stackers, as well as the containers.

The combination of Kavieff and Weselak still differs from the claimed invention because the combination does not expressly disclose that the apparatus body has an information display device capable of displaying movement of the containers.

Barbera-Guillem discloses a storage apparatus comprising an apparatus body (Figure 1:10) for storing samples on containers (Figure 2:22) inside a chamber adjusted to predetermined ambient conditions. This is taught in column 3, lines 9-67 and column 7, lines 48-65. Column 6, lines 2-28 indicate that each of the containers is provided with identification information, and a means for reading the identification information. Column 19, line 66 to column 20, line 60 teaches that a mechanism of tracking and storing identification information is provided within the incubator apparatus. Barbera-Guillem additionally teaches that the apparatus body has an information display device (Figure 1:94). Column 19, line 66 to column 20, line 60 and column 22, line 40 to column 23, line 11 indicate that identification information is used to control the normal functioning of incubator operations. Barbera-Guillem teaches that information derived from the identification code reader and/or position sensors is displayed on the display device. This information inherently could include maintenance times representing the status of the stackers and containers as they are being loaded and unloaded from the incubator storage device.

At the time of the invention, it would have been obvious to equip Kavieff's apparatus with an information display device capable of displaying data regarding the position of various containers and stackers within the storage chamber. Furthermore, it would have been obvious to utilize the identification and memory mechanisms disclosed by Kavieff, Weselak, and Barbera-Guillem to manage stacker maintenance procedures and to keep track of containers as they are moved off and on various shelves. This would have been beneficial because it would have

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reduced the time and labor associated with maintaining the storage apparatus and controlling its operation.

Response to Arguments

In response to Applicant's amendments, all previously made rejections under 35 U.S.C. 112 in the prior Office Action have been withdrawn.

Applicant's arguments filed 22 November 2006 with respect to the 35 U.S.C. 102 rejections involving Schlecker have been fully considered and are persuasive. These rejections have been withdrawn.

Applicant's arguments filed 22 November 2006 with respect to the 35 U.S.C. 102 rejections involving Bradley have been fully considered and are persuasive. These rejections have been withdrawn.

Applicant's arguments filed 22 November 2006, with respect to the 35 U.S.C. 102 rejections of claim 1 involving Kavieff have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the combination of Kavieff, Yahiro, Gonska and Walters.

The Walters reference addresses the deficiencies of Kavieff, Yahiro and Gonska by indicating that it is known in the incubator art to provide storage shelves arranged on rollers.

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During collection, cleaning, and maintenance, Walters teaches that the rollers allow one to easily remove the shelves via a sliding motion. By mounting the stackers disclosed by Kavieff and Gonska on a slidable shelf, the stackers may be easily removed from the device, which in turn reduces the amount of time that the interior of the incubator is exposed to the outside environment.

Applicant's arguments filed 22 November 2006 with respect to the 35 U.S.C. 103 rejections of claim 15 involving the combination of Kavieff, Weselak and Barbera-Guillem have been fully considered but they are not persuasive.

Applicant's principle arguments are

(a) The cited prior art does not hint or suggest displaying the claimed "time to deliver" information and that just because a device could inherently display certain information does not make obvious an apparatus having information processing means for storing delivery management information for managing "time to deliver."

In response to Applicant's arguments, please consider the following comments.

As noted in the rejection above, the combination of Kavieff, Weselak and Barbera-Guillem disclose an automated container and stacker management system that includes all of the *structural* limitations set forth in claim 15. Most notably, Barbera-Guillem teaches that information processing means are provided for tracking containers as they move to and from stackers using container identification information. Although it is agreed that Barbera-Guillem does not explicitly teach that this processing means is used for managing "time to deliver" through giving the display device a command to display arrival of delivery times, this limitation

merely represents an *intended use*. Barbera-Guillem clearly discloses information processing means, an information display device, container sensors, container identification readers, and an automated management system capable of automatically tracking the movement of containers. Accordingly, there are no structural limitations set forth in Applicant's claimed invention that distinguish it from the Kavieff, Weselak and Barbera-Guillem references. Since there are no structural differences, there is no reason to believe that the prior art combination of record is incapable of monitoring delivery time.

In response to applicant's argument that the prior art does not suggest an information processing means *for managing the time to deliver*, a recitation of the *intended use* of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan A. Bowers whose telephone number is (571) 272-8613. The examiner can normally be reached on Monday-Friday 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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